



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,912	02/27/2004	Kenji Sakakibara	4041K-000181	8914

27572 7590 07/21/2006

HARNESSE, DICKEY & PIERCE, P.L.C.  
P.O. BOX 828  
BLOOMFIELD HILLS, MI 48303

EXAMINER

CHANG, SUNRAY

ART UNIT PAPER NUMBER

2121

DATE MAILED: 07/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/789,912	Applicant(s) SAKAKIBARA ET AL.	
	Examiner Sunray Chang	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

1. This office action is in responsive to the paper filed on May 23<sup>rd</sup>, 2006.

Claims 1 – 6 and 8 – 11 are presented for examination.

Claims 1 – 6 and 8 – 11 are rejected.

Claim 7 is cancelled.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1 – 11 are rejected** under 35 U.S.C. 102(b) as being anticipated by Yasunobu Iwata (U.S. Patent No. 5,485,366, and referred to as **Iwata** hereinafter).

**Regarding independent claims 1, 8, 10 and 11, Iwata teaches,**

- A sequence controller for system control provided with a data holding unit [32, Fig. 1, 3, 7, 10 and 11] storing data [currently executed step number storage table, Fig. 10] from a data preparation/input unit, [31, 33 and 34, Fig. 7] and a control unit, [4A, 4 in Fig. 1, 3, 7, 10 and 11] wherein:
- said data preparation/input unit [31, 33 and 34, Fig. 7] comprising a system control setting menu that is configured with a table [31, 33 and 34 3 tables in Fig. 7] having column headings and row headings [Fig. 10 & 11], either of the headings including operation data

items and condition data items and the other of the headings including operation step items [executed step number, transition condition number, and next executed step number, Fig. 10, see further Fig. 11], wherein operation data instructing operations and condition data for causing said operations in accordance with a predetermined sequence are prepared by setting the operation and condition data at each operation step in said system control setting menu. [see Fig. 1, Fig. 7 and Col. 4, Line 53 – Col. 5, Line 6]

- said data holding unit stores operation data instructing operations [step operation program table, Fig. 1] and condition data for causing said operations in accordance with the predetermined sequence [transition condition program table, Fig. 1], [see also Fig. 7 and Col. 4, Line 53 – Col. 5, Line 6] and
- said control unit generates operation instruction signals for instructing said operations from said operation data in accordance with a predetermined sequence and executes said operations when conditions defined in said condition data are satisfied [process is complete, Col. 5, Lines 54 – 62]. [process sequence controlling diction, sequence-controlling a controlled object, Abstract, Col. 3, Line 60 – Col. 4, Line 12 and Fig. 1, 4 and 7; see also Col. 1, Lines 18 – 35 and Col. 1, Line 36 – Col. 2, Line 3]
- various type of sensors [optical sensors, Col. 1, Lines 49 – 60]

**Regarding dependent claim 2, Iwata teaches,**

A sequence controller as set forth in claim 1, wherein

Art Unit: 2121

- said condition data includes monitoring data. [currently executed step number, Fig. 1, 4 and Col. 5, Lines 43 – 62; or designate position detection optical sensors, Fig. 8, and Col. 1, Lines 49 – 52]

**Regarding dependent claim 3, Iwata teaches,**

A sequence controller as set forth in claim 1, wherein

- said condition data includes other numerical data. [stop-time execution operation, Fig. 1, 4, Col. 5, Lines 43 – 62]

**Regarding dependent claim 4, Iwata teaches,**

A sequence controller as set forth in claim 3, wherein

- said other numerical data is time data. [stop-time execution operation, Fig. 1, 4, Col. 5, Lines 43 – 62]

**Regarding dependent claim 5, Iwata teaches,**

A sequence controller as set forth in claim 1, which

- determines whether said conditions are satisfied by comparing input signals from said system being controlled and said condition data. [condition ... checked, Col. 5, Lines 43 – 62]

**Regarding dependent claim 6, Iwata teaches,**

A sequence controller as set forth in claim 1, wherein

Art Unit: 2121

- said control unit converts said operation data and condition data to input/output data of a programmable logic controller. [sequence program employed when controlled object is controller by the sequence controller, Fig. 4, and Col. 5, Lines 7 – 15; see also Col. 4, Line 53 – Col. 5, Line 41]

**Regarding dependent claim 9, Iwata teaches,**

A system control method as set forth in claim 8, wherein

- said condition data includes preset time data and steps for causing operation of said system cause operation of said system conditional on said time having elapsed. [101. Fig. 4]

**Response to Amendment**

**Claim Rejections - 35 USC § 102**

3. Applicants amend the independent claims to include one new issue, “a data holding unit storing data from a data preparation/input unit, the data preparation/input unit comprising a system control setting menu that is configured with a table having column headings and row headings, either of the headings including operation data items and condition data items and the other of the headings including operation step items a data holding unit storing data from a data preparation/input unit”.

The examiner further redefines the rejections to reject this new issue that several tables (31, 33, 34), with column headings and row headings including operation data items and condition data items or operation step items, grouped together to deliver the operation data instructing operations and condition data to be stored in “current executed step number storage

Art Unit: 2121

table” (32) for causing said operations in accordance with the predetermined sequence. The term, “current executed step number storage table”, has the operation data and condition data for current executed steps.

### **Conclusion**

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2121

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunray Chang whose telephone number is (571) 272-3682. The examiner can normally be reached on M-F 7:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (571) 272-3687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-746-3506.



Anthony Knight  
Supervisory Primary Examiner  
Group Art Unit 2121  
Technology Center 2100  
U.S. Patent and Trademark Office

July 11, 2006